



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,015	01/08/2004	Harry W. Parker	0225	7136

112 7590 01/31/2006

ARMSTRONG WORLD INDUSTRIES, INC.
LEGAL DEPARTMENT
P. O. BOX 3001
LANCASTER, PA 17604-3001

EXAMINER

SELLERS, ROBERT E

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 01/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/754,015

Applicant(s)

PARKER ET AL.

Examiner

Robert Sellers

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) 7,8,15-20 and 27-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,9-14 and 21-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/13/2004</u> | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1712

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1. The epoxidized vegetable oil as the ricinoleic acid component does not fall within the species denoted in claim 1 wherefrom claim 2 depends since they are limited to castor oil (estolide) and/or ricinoleic acid (estolide). More favorable consideration would be given to the designation of the epoxidized vegetable oil as the epoxy group-containing compound.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1712

Claims 1-6, 9-11, 21, 22 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent No. 5-132616 (Japanese '616).

2. Japanese '616 (Derwent abstract) shows a cured composition prepared from a reactive silicon groups-containing polyoxyalkylene polymer, epoxidized soybean oil (within the ambit of the elected species of epoxidized vegetable oil), castor oil and the elected species of calcium carbonate (i.e. limestone). The reactive groups-containing polyoxyalkylene polymer cures in the presence of the epoxidized soybean oil, thereby falling within the broad crosslinker of independent claim 1. More favorable consideration would be given to the limitation of the crosslinker of claim 1 to the polyfunctional amine, polycarboxylic acid and/or polyacrylate of claim 12 or 24.

Claims 1, 3-6, 11-14, 21, 22, 24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Romanian Patent No. 111,782.

3. The abstracts for the Romanian patent shows a blend of a bisphenol A epoxy resin, castor oil, a diethylenetriamine hardener and a filler such as alumina and silica.

Claims 1, 3-6, 12, 13, 21, 22 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by CAPLUS accession no. 1987:34138 for the Stroiltel'nye Materialy article by Lavrega.

4. Lavrega sets forth polyamine-cured epoxy resin floor coverings further comprising castor oil and fillers such as silica, cement, quartz sand and agloporite.

Claims 1, 3-6, 11-14 and 21, 22, 24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Soviet Union Patent No. 1,479,474.

5. The abstracts for the Soviet Union patent discloses a blend (Derwent abstract) of a bisphenol A epoxy resin, a diethylene triamine methylphenol hardener, castor oil along with graphite and alumina fillers.

Claims 1, 3, 11, 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by German Patent No. 1,804,364 or CAPLUS accession no. 1989:595992 for the Polymer Communications article by Cuadrado et al.

6. The abstracts for the German patent reports a bisphenol A diglycidyl ether, a hexahydrophthalic anhydride crosslinker, castor oil and a benzyldimethylamine crosslinking catalyst (i.e. PHCH₂Nme₂).

7. Cuadrado et al. is directed to a bisphenol A diglycidyl ether cured with toluene diisocyanate (TDI) in the presence of a piperidine/TDI latent initiator and castor oil.

Claims 1, 12-14, 21, 22, 24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by May Patent No. 2,921,040.

8. May (col. 6, Example 1) shows a mixture of a diglycidyl ether of bisphenol A (col. 3, lines 49-50, Polyether A), a hardener exemplified by piperidine wherein diethylenetriamine is also suitable (col. 5, lines 59-60) and refined castor oil polyester (col. 1, lines 34-35). The refined castor oil polyester is equivalent to the claimed castor oil estolide according to the instant specification on pages 8-9, paragraphs 28 and 29.

Art Unit: 1712

Claims 1, 3-6, 9, 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Czechoslovakian Patent No. 90264.

9. The Czech patent espouses a formulation obtained from a polyamide, an epoxy resin, a hardener, castor oil and a titanium dioxide filler.

Claims 1, 3-6, 11 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent No. 55-129416 (Japanese '416).

10. Japanese '416 describes a composition derived from a diglycidyl ether of bisphenol A (CAPLUS abstract, Epikote 828), a polycarboxylic acid anhydride curing agent, castor oil and a 1-benzyl-2-methylimidazole crosslinking catalyst.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1712

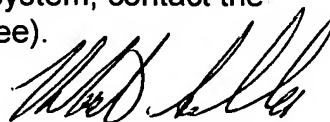
Claims 1-6, 11-14 and 21-24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graham et al. Patent No. 3,510,489.

11. Graham et al. (col. 2, lines 35-39) is directed to a mixture of a polymer, a ferromagnetic material, a polymerizable monomer such as trimethylolpropane trimethacrylate (within the confines of the polyacrylate crosslinker of claims 12 and 24), and a wetting agent such as castor oil (col. 7, Example II, lines 13-14 and 17), an epoxidized soybean oil and di-t-butyl peroxide (col. 5, Mixture D, lines 31-33 and 34) and fillers (col. 3, lines 28-29).

12. Although the claimed castor oil is not exemplified together with the epoxidized soybean oil, it would have been obvious to employ a particular plasticizer such as the epoxidized soybean oil with a certain wetting agent such as castor oil in order to optimize the dispersion of the ferromagnetic material (col. 3, lines 26-29).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Sellers whose telephone number is (571) 272-1093. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).



Robert Sellers
Primary Examiner
Art Unit 1712